

SEQUENCE LISTING

<110> Gerald, Christophe P.G.
Jones, Kenneth A.
Bonini, James A.
Borowsky, Beth

<120> DNA Encoding Mammalian Neuropeptide FF (NPFF) Receptors
and Uses Thereof

<130> 1795/57155-A

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<150> 09/161,113

<151> 1998-09-25

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<170> PatentIn Ver. 2.0 - beta

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<211> 1410

<212> DNA

<213> Rattus norvegicus

<400> 1

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35 40 45
Ala Tyr Val Leu Ile Phe Leu Leu Cys Met Val Gly Asn Thr Leu Val
50 55 60
Cys Phe Ile Val Leu Lys Asn Arg His Met Arg Thr Val Thr Asn Met
65 70 75 80
Phe Ile Leu Asn Leu Ala Val Ser Asp Leu Leu Val Gly Ile Phe Cys
85 90 95
Met Pro Thr Thr Leu Val Asp Asn Leu Ile Thr Gly Trp Pro Phe Asp
100 105 110
Asn Ala Thr Cys Lys Met Ser Gly Leu Val Gln Gly Met Ser Val Ser
115 120 125
Ala Ser Val Phe Thr Leu Val Ala Ile Ala Val Glu Arg Phe Arg Cys
130 135 140
Ile Val His Pro Phe Arg Glu Lys Leu Thr Leu Arg Lys Ala Leu Phe
145 150 155 160
Thr Ile Ala Val Ile Trp Ala Leu Ala Leu Leu Ile Met Cys Pro Ser
165 170 175
Ala Val Thr Leu Thr Val Thr Arg Glu Glu His His Phe Met Leu Asp
180 185 190
Ala Arg Asn Arg Ser Tyr Pro Leu Tyr Ser Cys Trp Glu Ala Trp Pro
195 200 205
Glu Lys Gly Met Arg Lys Val Tyr Thr Ala Val Leu Phe Ala His Ile
210 215 220

Tyr	Leu	Val	Pro	Leu	Ala	Leu	Ile	Val	Val	Met	Tyr	Val	Arg	Ile	Ala	225	230	235	240
Arg	Lys	Leu	Cys	Gln	Ala	Pro	Gly	Pro	Ala	Arg	Asp	Thr	Glu	Glu	Ala	245	250	255	
Val	Ala	Glu	Gly	Gly	Arg	Thr	Ser	Arg	Arg	Arg	Ala	Arg	Val	Val	His	260	265	270	
Met	Leu	Val	Met	Val	Ala	Leu	Phe	Phe	Thr	Leu	Ser	Trp	Leu	Pro	Leu	275	280	285	
Trp	Val	Leu	Leu	Leu	Leu	Ile	Asp	Tyr	Gly	Glu	Leu	Ser	Glu	Leu	Gln	290	295	300	
Leu	His	Leu	Leu	Ser	Val	Tyr	Ala	Phe	Pro	Leu	Ala	His	Trp	Leu	Ala	305	310	315	320
Phe	Phe	His	Ser	Ser	Ala	Asn	Pro	Ile	Ile	Tyr	Gly	Tyr	Phe	Asn	Glu	325	330	335	
Asn	Phe	Arg	Arg	Gly	Phe	Gln	Ala	Ala	Phe	Arg	Ala	Gln	Leu	Cys	Trp	340	345	350	
Pro	Pro	Trp	Ala	Ala	His	Lys	Gln	Ala	Tyr	Ser	Glu	Arg	Pro	Asn	Arg	355	360	365	
Leu	Leu	Arg	Arg	Arg	Val	Val	Val	Asp	Val	Gln	Pro	Ser	Asp	Ser	Gly	370	375	380	
Leu	Pro	Ser	Glu	Ser	Gly	Pro	Ser	Ser	Gly	Val	Pro	Gly	Pro	Gly	Arg	385	390	395	400
Leu	Pro	Leu	Arg	Asn	Gly	Arg	Val	Ala	His	Gln	Asp	Gly	Pro	Gly	Glu	405	410	415	
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Tyr Gln His Thr Ser Pro Val Ala Ala Met Phe Ile Val Ala Tyr Ala
35 40 45
Leu Ile Phe Leu Leu Cys Met Val Gly Asn Thr Leu Val Cys Phe Ile
50 55 60
Val Leu
65

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<212> DNA
<213> Homo sapiens

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aatattacct atgtgaacta ctatcttcac cagcctcaag tggcagcaat cttcattatt 180
tcctactttc tgatcttctt tttgtgcatg atgggaaata ctgtgggttg ctttattgta 240
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gatttactag ttggcatatt ctgcatgcct ataacactgc tggacaatat tatagcagga 360
tggccatttg gaaacacgat gtgcaagatc agtggattgg tccagggaat atctgtcgca 420
gcttcagtct ttacgttagt tgcaattgct gtagataggt tccagtgtgt ggtctaccct 480
tttaaacc aa agctcactat caagacagcg tttgtcatta ttatgatcat ctgggtccta 540
gccatcacca ttatgtctcc atctgcagta atgttacatg tgcaagaaga aaaatattac 600
cgagtgaac tcaactccca gaataaaacc agtccagtct actgggtgcc ggaagactgg 660
ccaaatcagg aaatgaggaa gatctacacc actgtgctgt ttgccaaat ctacctggct 720
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gttctcaca caggcaggaa gaaccaggag cagtggcacg tgggtgtccag gaagaagcag 840
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<210> 6
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<212> PRT
<213> Homo sapiens

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Thr Tyr Val Asn Tyr Tyr Leu His Gln Pro Gln Val Ala Ala Ile Phe
35 40 45
Ile Ile Ser Tyr Phe Leu Ile Phe Phe Leu Cys Met Met Gly Asn Thr
50 55 60
Val Val Cys Phe Ile Val Met Arg Asn Lys His Met His Thr Val Thr
65 70 75 80
Asn Leu Phe Ile Leu Asn Leu Ala Ile Ser Asp Leu Leu Val Gly Ile
85 90 95
Phe Cys Met Pro Ile Thr Leu Leu Asp Asn Ile Ile Ala Gly Trp Pro
100 105 110
Phe Gly Asn Thr Met Cys Lys Ile Ser Gly Leu Val Gln Gly Ile Ser
115 120 125
Val Ala Ala Ser Val Phe Thr Leu Val Ala Ile Ala Val Asp Arg Phe
130 135 140
Gln Cys Val Val Tyr Pro Phe Lys Pro Lys Leu Thr Ile Lys Thr Ala
145 150 155 160
Phe Val Ile Ile Met Ile Ile Trp Val Leu Ala Ile Thr Ile Met Ser
165 170 175
Pro Ser Ala Val Met Leu His Val Gln Glu Glu Lys Tyr Tyr Arg Val
180 185 190
Arg Leu Asn Ser Gln Asn Lys Thr Ser Pro Val Tyr Trp Cys Arg Glu
195 200 205

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225					230					235					240
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Lys	Asn	Gln	Glu	Gln	Trp	His	Val	Val	Ser	Arg	Lys	Lys	Gln	Lys	Ile
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Ile	Lys	Met	Leu	Leu	Ile	Val	Ala	Leu	Leu	Phe	Ile	Leu	Ser	Trp	Leu
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Pro	Leu	Trp	Thr	Leu	Met	Met	Leu	Ser	Asp	Tyr	Ala	Asp	Leu	Ser	Pro
	290					295					300				
Asn	Glu	Leu	Gln	Ile	Ile	Asn	Ile	Tyr	Ile	Tyr	Pro	Phe	Ala	His	Trp
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Leu	Ala	Phe	Gly	Asn	Ser	Ser	Val	Asn	Pro	Ile	Ile	Tyr	Gly	Phe	Phe
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Asn	Glu	Asn	Phe	Arg	Arg	Gly	Phe	Gln	Glu	Ala	Phe	Gln	Leu	Gln	Leu
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Cys	Gln	Lys	Arg	Ala	Lys	Pro	Met	Glu	Ala	Tyr	Ala	Leu	Lys	Ala	Lys
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Ser	His	Val	Leu	Ile	Asn	Thr	Ser	Asn	Gln	Leu	Val	Gln	Glu	Ser	Thr
	370					375					380				
Phe	Gln	Asn	Pro	His	Gly	Glu	Thr	Leu	Leu	Tyr	Arg	Lys	Ser	Ala	Glu
385					390					395					400
Lys	Pro	Gln	Gln	Glu	Leu	Val	Met	Glu	Glu	Leu	Lys	Glu	Thr	Thr	Asn
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 145 150 155 160

Thr Ile Ala Val Ile Trp Ala Leu Ala Leu Leu Ile Met Cys Pro Ser
 165 170 175

Ala Val Thr Leu Thr Val Thr Arg Glu Glu His His Phe Met Val Asp
 180 185 190

Ala Arg Asn Arg Ser Tyr Pro Leu Tyr Ser Cys Trp Glu Ala Trp Pro
 195 200 205

Glu Lys Gly Met Arg Arg Val Tyr Thr Thr Val Leu Phe Ser His Ile
 210 215 220

Tyr Leu Ala Pro Leu Ala Leu Ile Val Val Met Tyr Ala Arg Ile Ala
 225 230 235 240

Arg Lys Leu Cys Gln Ala Pro Gly Pro Ala Pro Gly Gly Glu Glu Ala
 245 250 255

Ala Asp Pro Arg Ala Ser Arg Arg Arg Ala Arg Val Val His Met Leu
 260 265 270

Val Met Val Ala Leu Phe Phe Thr Leu Ser Trp Leu Pro Leu Trp Ala
 275 280 285

Leu Leu Leu Leu Ile Asp Tyr Gly Gln Leu Ser Ala Pro Gln Leu His
 290 295 300

Leu Val Thr Val Tyr Ala Phe Pro Phe Ala His Trp Leu Ala Phe Phe
 305 310 315 320

Asn Ser Ser Ala Asn Pro Ile Ile Tyr Gly Tyr Phe Asn Glu Asn Phe
 325 330 335

Arg Arg Gly Phe Gln Ala Ala Phe Arg Ala Arg Leu Cys Pro Arg Pro
 340 345 350

Ser Gly Ser His Lys Glu Ala Tyr Ser Glu Arg Pro Gly Gly Leu Leu
 355 360 365

His Arg Arg Val Phe Val Val Val Arg Pro Ser Asp Ser Gly Leu Pro
 370 375 380

Ser Glu Ser Gly Pro Ser Ser Gly Ala Pro Arg Pro Gly Arg Leu Pro
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Leu Arg Asn Gly Arg Val Ala His His Gly Leu Pro Arg Glu Gly Pro
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Gly Cys Ser His Leu Pro Leu Thr Ile Pro Ala Trp Asp Ile
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<210> 9
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<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer/probe

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<210> 10
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<210> 11
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<210> 12
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<210> 14

<211> 26

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<223> Description of Artificial Sequence: primer/probe

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<210> 15

<211> 24

<212> DNA

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<212> DNA

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<210> 18

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer/probe

<400> 18

ctgctctgca tggtagggcaa cacc 24

<210> 19

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<212> DNA

<213> Artificial Sequence

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<212> DNA

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<210> 22

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<210> 23

<211> 24

<212> DNA

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<210> 24

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<223> Description of Artificial Sequence: primer/probe

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<210> 25

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<400> 34
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 gaccacacac tggaacctat ctac 24

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<210> 40
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<400> 40
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<210> 41
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<400> 41
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<210> 42
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